

CARPINTERIA HARBOR SEAL ROOKERY MONITORING AND PROTECTION PLAN

DECOMMISSIONING AND REMEDIATION OF THE CARPINTERIA OIL AND GAS PROCESSING FACILITIES SANTA BARBARA, CALIFORNIA

Project No. 2002-5211

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1.0 INTRODUCTION

This Carpinteria Harbor Seal Monitoring and Protection Plan (Plan) has been prepared on behalf of Chevron U.S.A. (Chevron) in support of the Decommissioning and Remediation of the Carpinteria Oil and Gas Processing Facilities Project (Project). The proposed Project includes demolition of surface and subsurface facilities and remediation of any subsurface impacted soil and groundwater at the Carpinteria Onshore Oil and Gas Processing Facility (Project Site). The Project will also include the removal of pipelines from the bluff and beach areas adjacent to the Casitas Pier and west of the Carpinteria Harbor Seal Rookery. This Plan outlines avoidance and minimization measures intended to reduce the potential for Project-related impacts on the harbor seals during temporary construction activities.

1.1 BEACH AND BLUFF PIPELINE DECOMMISSIONING SUMMARY

The nearshore worksite contains two pipeline decommissioning areas (Figure 1-1). East of the Casitas Pier, the Platform Gail and Grace Pipeline Bundle includes a concrete encased 10-inch oil and 10-inch gas pipeline bundle which originate from Platforms Grace and Gail. Additionally, a 10-inch idled oil pipeline is located on risers east of the Grace and Gail pipelines. The pipelines continue northward up the bluffs and through the Former Sandblast Area, then under the Union Pacific Railroad and into the Main Plant Area.

Additionally, the former Marketing and Marine Terminal Offloading Line Bundle is located west of the Casitas Pier. The Marketing and Marine Terminal mooring area supported two separate pipeline corridors from the onshore facilities which transported refined products from the Marketing Terminal and a separate crude oil line from the onshore Tank 861. The pipelines transect the beach and enter into a rock rip rap revetment below the edge of the bluff. The pipelines are buried within the bluff and leading into the Former Marketing Terminal Area.

1.1.1 Gail and Grace Bundle Pipeline Decommissioning

Beginning at the shoreward termination, in approximately 15 feet of water, the Gail and Grace pipeline bundle will be removed from the surf zone utilizing a combination of shore side construction crews and offshore dive crews. Surf zone and associated beach pipeline removal operations will be scheduled during seasonal work windows with the least amount of sand cover, avoiding the harbor seal rookery beach closure (December 1 through May 31st), and at extreme low tides when necessary, to facilitate safe recovery of each pipeline out to the mean low-low water (MLLW) line.

Working from the beach and the adjacent Casitas Pier, shore side crews will first have to remove the concrete armoring from the 10-inch pipelines that run to Platform Gail and Grace. The concrete currently protects the pipelines from damage through the surf zone and up to the base of the bluff.

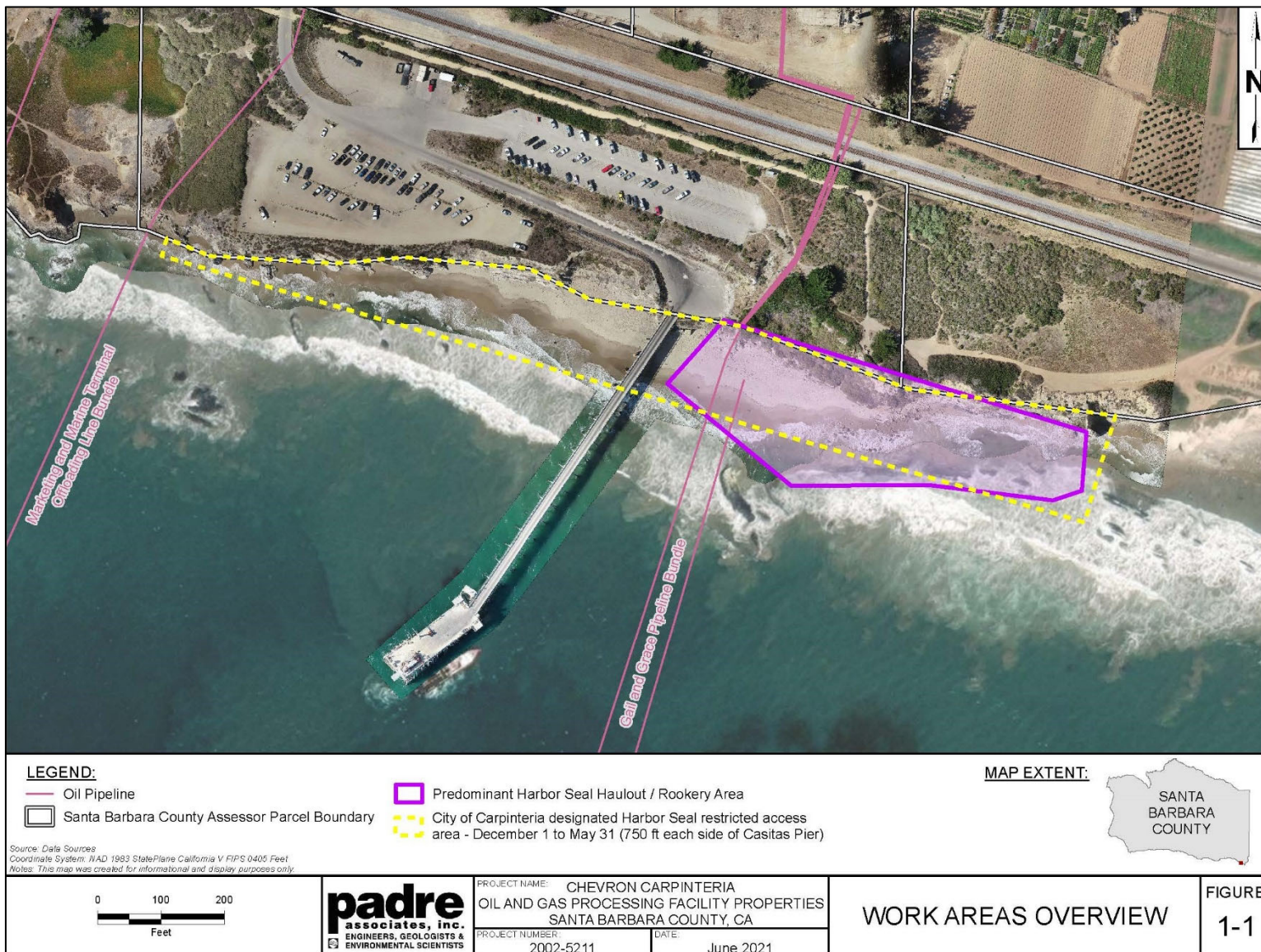


Figure 1-1. Site Location Map

Removal of the concrete armoring will require concrete saws and/or jack hammers and will be done with precision, in order to protect the pipelines underneath. As they are removed, pieces of concrete will be loaded into containers and lifted by the existing pier crane and transported to the asphalt staging area adjacent to the north end of the Casitas Pier for transport/disposal.

Pipelines will ideally be pulled from the surf zone onto an anchored derrick barge with dive support vessels stationed at a safe distance offshore. Divers will then locate the cut end of each pipeline and excavate as needed to prepare the pipe to be pulled offshore. Each nearshore pipeline will be attached to a pull winch or crane and lifted to the deck of the derrick barge.

The decommissioning of the Gail and Grace Bundle to the top of the bluff will be scheduled following the removal of the offshore and surf zone pipelines. All concrete armoring currently surrounding the Gail and Grace pipeline bundle up the bluff will be removed using similar methods as surf zone removal. Concrete pieces will be systematically cut, from the top of the bluff down, and placed into a container suspended from a crane, to be lifted to the staging area. Exposure and removal of the pipeline bundle through the bluff may require trenching techniques into the bluff face, dependent on bluff stability and depth of burial, to expose the pipelines and winch them to a safe location away from the bluff or into the adjacent asphalt staging area at the north end of the Casitas Pier, where they can be cut into disposable pieces and loaded into transport trucks.

The pipeline segments located across the Former Sand Blast Area and leading into the Onshore Processing Facility will be abandoned-in-place, with exception of the portion located beneath the Union Pacific Railroad right-of-way, which will be removed.

1.1.2 Marketing and Marine Terminal Offloading Line Bundle Pipeline Decommissioning

The former Marketing and Marine Terminal Offloading Line Bundle pipeline segments will be removed by sectioning the pipeline on the seafloor and lifting the cut pipe segments to the deck of the barge one section at a time. The offshore segment removal work will be terminated at approximately the 15-foot bathymetric contour line.

Beginning at the shoreline termination, the Marketing and Marine Terminal Offloading Line Bundle will be removed from the surf zone utilizing a combination of shore side construction crews and offshore dive crews. Surf zone removal operations will be scheduled during seasonal work windows with the least amount of sand cover and at extreme low tides to facilitate safe recovery of each pipeline out to the MLLW line. A derrick barge and dive support vessel will be mobilized and positioned at the offshore cut end of the pipelines. Due to shallow depths, the derrick barge will require an anchor-handling vessel to run all the vessels anchors to pre-determined anchor locations. Divers will then locate the previously cut end of each pipeline and excavate as needed to prepare the pipe to be pulled toward the offshore spread, similar to the Gail and Grace Bundle.

Working from the beach, shore side crews will expose each buried pipeline on the beach, if needed, from the shoreward extent of rip rap at the base of the bluffs to the MLLW line. Each pipe will be uncovered as far into the surf zone as safely practicable. The decommissioning of the pipelines within the bluff and vault along the top of the bluff will be scheduled following the removal of the offshore and surf zone pipelines as well as any pipeline segments that run south from the Project plant facilities toward the shore. The removal of pipelines from the bluff will require an excavator, positioned safely away from the bluff edge, to dig a trench to uncover buried segments

of pipe. In addition, all rip rap currently surrounding the 20-inch loading line and associated pipelines will be removed to expose the bluff face. Rip rap will be systematically removed up the bluff to extent necessary with an approved lifting and rigging plan, an excavator with a thumb and soft sling attachments, and loader positioned safely on the bluff. Once the pipelines are fully exposed in the bluff, they will be lifted or winched to a safe location away from the bluff where they can be cut again into disposable pieces.

2.0 CARPINTERIA HARBOR SEAL POPULATION AND REGULATIONS

The beach adjacent to the Gail and Grace Bundle Project Site is a documented Pacific harbor seal (*Phoca vitulina richardsii*) haul out area and rookery (Figure 2-1). This beach is one of four harbor seal rookeries in California and documentation suggests that harbor seals have used the site as a rookery for over 100 years MMCG (2002). Use of the area by harbor seals varies seasonally, with pupping predominately occurring between February and March. During the summer months, the area is used as a nighttime haul out. To protect the seals during haul-out and pupping periods, the City of Carpinteria closes the beach to the public from December 1st through May 31st. The beach is closed within 750 feet west and east of the rookery, as well as out to 1,000 feet offshore (Figure 1-1).

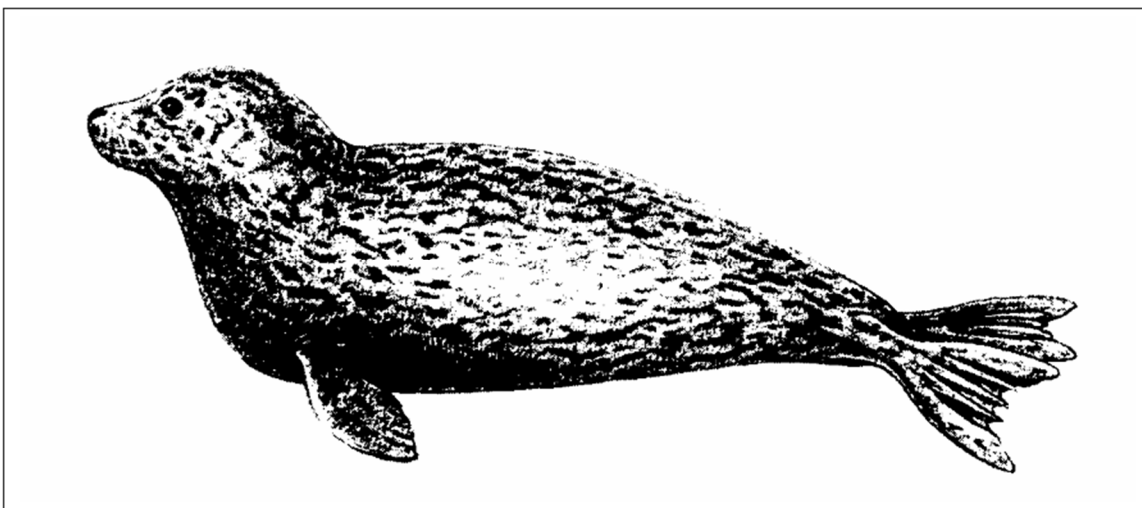


Figure 2-1. Pacific Harbor Seal (Depiction)

The Pacific harbor seal ranges from Cedros Island (Baja California) through the Aleutian Islands and to the Pribilof Islands. There are approximately 27,000 harbor seals along the California Coast (Carretta et al., 2015). Daugherty, 1985 and Yates, 1988 characterize the Pacific harbor seal as chunky-shaped, with a spotted coat, large eyes, and square muzzle; the front flippers are small, and the hind flippers are backward-pointing. Males, which can be up to six feet long and weigh over 300 pounds, are slightly larger than females. Pups wean within four to six weeks of birth and individuals of this species have been known to reach 40 years of age.

The Carpinteria harbor seal rookery is located adjacent to Casitas Pier, which operates daily in support of offshore oil and gas activities. The seals in the area are acclimated, to an extent, to regular human activity around the Pier. During previous repair and construction work around the rookery, harbor seals have been exposed to disturbances including vehicle and boat sounds, machinery, hammering or grinding on the pier, vibratory pile driving and crane activities, and concrete demolition. In addition, human disturbances around the rookery when the beach is open include people walking, jogging, fishing, intentional harassment by children or dogs (on and off leash), low-flying helicopters, and use of watercraft (kayaks, boat, and paddleboards) (California Coastal Commission, 2020).

Current reports indicate that approximately 100 to 150 adults and up to 60 pups can be found at the Carpinteria rookery in February and March (Carpinteria Seal Watch <https://carpinteriasealwatch.org/about/>). Table 2-1 below provides 2021 month counts from the rookery.

Table 2-1. 2021 Seal Watch Totals

Month	Week	High adult count	High pup count
January	Jan 1 - Jan 3	129	0
	Jan 4 - Jan 10	68	0
	Jan 11 - Jan 17	77	0
	Jan 18 - Jan 24	102	1
	Jan 25 - Jan 31	102	1
February	Feb 1 - Feb 7	87	2
	Feb 8 - Feb 14	92	3
	Feb 15 - Feb 21	92	10
	Feb 22 - Mar 28	91	27
March	Mar 1 - Mar 7	122	45
	Mar 8 - Mar 14	143	53
	Mar 15 - Mar 21	137	50+
	Mar 22 - Apr 28	153	59
April	Mar 29 - Apr 4	137	56
	Apr 5 - Apr 11	122	20+
	Apr 12 - Apr 18	182	10
	Apr 19 - Apr 25	169	2
May	Apr 26 - May 2	169	0
	May 3 - May 9	220	0
	May 10 - May 16	178	0

Harbor seals are a protected species under the Marine Mammal Protection Act of 1972 (MMPA). Under the requirements of the MMPA the take of protected marine mammals is prohibited. Take is defined “to harass, hunt, capture, or kill, or attempt to harass, hunt, capture or kill any marine mammal.” Harassment is defined in the 1994 amendments to the MMPA as “...any act of pursuit, torment or annoyance...” and has two levels: Level A has the potential to injure a marine mammal or marine mammal stock, and Level B has the potential to disturb a marine mammal in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding or sheltering. Penalties for violating any provision of the MMPA range from \$10,000 to \$20,000 and imprisonment for no more than one year per incident.

3.0 POTENTIAL IMPACTS

The Carpinteria harbor seal rookery is located approximately 270 feet from the east side of the Gail and Grace pipeline bundle and approximately 1,200 feet east of the Marketing and Marine Terminal Offloading Line Bundle beach and surf zone pipeline removal area(s). Project decommissioning activities, including removal of cement armaments, removal of rip rap, cutting of the pipe into sections and pulling of pipe sections offshore, have the potential to cause a significant disturbance to harbor seals if they are hauled-out on the beach during Project activities. Although no injury or mortality is expected to occur, even Project-related foot traffic on the beach may cause hauled-out harbor seals to startle and flush into the water, which could qualify as a Level B harassment as defined by National Marine Fisheries Service (NMFS) (disrupting behavioral patterns).

The proposed Project will require personnel and small equipment to access and temporarily utilize a portion of the beach. Project activities could result in noise from demolition and from the physical presence of workers and equipment in proximity to the rookery. Due to the sensitivity of hauled-out seals, particularly mother and newborn pups, protective measures will be required to reduce these potential impacts to the maximum extent feasible as described in Section 4.0 (Avoidance and Protection Measures).

4.0 AVOIDANCE AND PROTECTION MEASURES

The Project would occur within the beach and nearshore areas of Casitas Pier. The decommissioning activities will be conducted by a work crew utilizing hand tools and potentially small equipment. Staging of equipment and trucks will occur within the paved parking area east of Casitas Pier. No trucks or equipment will be staged on the beach. Electric and air lines will be run, as needed, from the Project staging area to the immediate work area on the beach and removed each day following work activities. No tools or equipment will remain on the beach overnight.

Project activities will be scheduled during low tide windows and limited to daylight hours only to maximize visibility and ensure safety during repair work. In addition, a Marine Wildlife Monitor (MWM) will remain onsite during all work to ensure that activities are limited to the immediate work area. All Project activities will be conducted in accordance with standard Chevron best management practices (BMPs) and in accordance with all laws and regulations.

Given the biological sensitivity of the Project area, a number of marine wildlife protection measures have been incorporated by Chevron into the Project. These measures have been developed based upon protection measures adhered to during previous work activities in the Project area, as well as direct input from responsible agencies; including the National Marine Fisheries Service (NMFS,) California Coastal Commission (CCC), and City of Carpinteria, as well as input from the Carpinteria Seal Watch Organization. The following marine wildlife protection measures would be followed during the proposed Project activities:

- **Project Timing:** It will be a priority of the Project to schedule activities outside of the pupping season. However, there is the potential the proposed decommissioning Project activities will occur for a short period during the period that the beach is closed to the public. Project activities adjacent to the rookery during pupping season (December 1 through May 31) will be minimized to the maximum extent feasible to conduct pipeline decommissioning activities.
- **Carpinteria Seal Watch Coordination:** Given their extensive database of information regarding the local harbor seal population in this area, the Carpinteria Seal Watch organization will be notified prior to initiation of Project activities on the bluff or beach to best coordinate timing and initiation of work activities. One of the onsite marine mammal monitors will work directly with Seal Watch volunteers present at the overlook to coordinate direct observation of harbor seal activities during Project-related activities.
- **Pre-Project Notifications:** Once coordination with Carpinteria Seal Watch has been completed, Chevron will immediately notify Ms. Tina Fahy (NMFS) regarding upcoming work activities. Additionally, Chevron will notify Ms. Fahy at least 48 hours prior to initiation of bluff or beach Project activities and will include information on the location of mother/pups pairs in relationship to the work area. This notification will be copied to all other responsible agencies, including; but not limited to the California Coastal Commission, U.S. Army Corps of Engineers, Regional Water Quality Control Board, and the City of Carpinteria.

- **Project Personnel:** The number of on-beach personnel will be minimized. Work crews will access the work site to the west of the pier and approach the area adjacent to the foot of the bluff. A marine wildlife monitor will be present at all times during required work activities, including activities scheduled outside of pupping season (June 1 through November 30), until the surf zone and bluff pipeline removal has been completed and all equipment/personnel have left the area.
- **Equipment Storage:** Required equipment will be stored on the paved parking lot above the beach and away from the bluff edge.
- **Marine Wildlife Sensitivity Training:** Prior to the initiation of the Project, personnel will be given marine wildlife sensitivity training. This training will include specifics regarding Project restrictions, operational limits, and ingress/egress methodology. The crews will be instructed to wear neutral colored clothing, and to move slowly during ingress/egress as well as minimize hand gestures or signals during work activities to avoid startling the harbor seals.
- **Minimization of the Work Zone:** Project-related activities on the bluff and beach will be restricted to the minimum area necessary to conduct work.
- **Place a Screen Between the Work Area and Seal Rookery Area:** Due to its close proximity to the harbor seal rookery, Chevron may erect a temporary screen between the Gail and Grace pipeline bundle work area and seal rookery area to further reduce the potential for behavioral changes of nearby harbor seals. The screen will be approximately 8-feet high by 30-feet wide, shall be maintained taut to avoid flapping or excessive movement due to wind or wave action, and will be positioned to screen the immediate Project area from view of the rookery area. The screen will be placed, maintained, and removed in a manner and at times that avoid disturbance to seal present on the beach; for example, placing it before first light on the first day of work and removing it after last light on the final day of work.
- **Minimization of Noise:** Communications between Project personnel will be kept to a minimum. Except in an emergency, no shouting will be allowed. Low volume radio transmissions will be used to reduce potential disturbance to the rookery. Any concrete demolition will be performed outside of the pupping season to minimize noise impacts to nursing seals. Additional noise dampening shields in addition to a temporary screen may be constructed around the work area to reduce the level of noise emitted during work.
- **Best Management Practices:** Repair activities will be performed with the implementation of all Best Management Practices (BMPs). No trash will be discarded on the beach and all trash will be secured in bins with lids. Any Project-generated debris will be removed from the beach and taken to an appropriate disposal facility.
- **Stop-Work Authority:** The on-site MWM will have the authority to stop all operations to avoid harassment of seals. Harassment is defined by the sudden flushing of seals into the water, potentially separating nursing cow and pup pairs, or any abnormal or

aggressive behaviors. The monitor will record, photograph, and report compliance with the protective measures throughout the pipeline decommissioning activities.

- **In the Event of Interaction:** In the event of any signs of distress are noted during Project activities, the monitor will notify the construction supervisor and operations will immediately stop Project operations. The monitor will also contact a pre-determined contact at National Oceanic and Atmospheric Administration (NOAA) Fisheries and work activities will not resume until NOAA Fisheries has agreed with any proposed changes to the work procedures.

4.1 NOTIFICATIONS

Chevron will notify applicable agencies, included NOAA Fisheries and California Coastal Commission within 14 days prior to the start of work. Agency notification will include a summary of Project activities that need to be completed and the anticipated work schedule. Additional impact avoidance and minimization measures will be added (if required) following consultation with NOAA Fisheries.

4.2 DATA COLLECTION AND REPORTING

The MWM will ensure that the Project is in compliance with all necessary permits, and that Best Management Practices are followed. The MWM will also be responsible for recording the activities and, if necessary, for stopping the activities in the event that significant changes to harbor seal activities are observed. In addition to briefing all Project personnel on the protective measures prior to initiating work each day, the monitor will delineate the equipment and personnel ingress/egress corridors.

4.3 DATA COLLECTION

Prior to repair activities, the MWM will count and record the number and species of all marine mammals that are within the Project area (within visual range along the beach) and take photographs of the Project site and access route. At regular intervals during the day, the monitor will record the number and location of harbor seals and document the decommissioning activities. Changes in the behavior or number of individuals and/or their proximity to the Project site prior to, during, and immediately following noise-producing activities will be recorded and photographed. The type of activity that promulgated changes in harbor seal abundance or behavior will also be recorded.

During the repair activities, the MWM will also take notes on the weather (i.e. wind direction and speed, percent cloud cover, wave height and direction), non-project human activities, and ex-limital (outside the Project boundaries) observations of avifauna and marine mammals. Although none is expected, should the monitor observe any activity that are considered to be harassment of a marine mammal, that activity will be stopped immediately, and the Chevron Project Manager and NOAA Fisheries representative will be contacted immediately via cell phone.

4.4 REPORTING

Data and observations that were recorded during the removal activities will be presented in tabular and text format in a technical report that will also include copies of photographs. The report will summarize the Project decommissioning activities as well as protective measures and

their effectiveness. The technical report will be provided to the regulatory agencies within 30 days of completion of the final beach or bluff decommissioning activities.

5.0 REFERENCES

- California Coastal Commission. 2020. Staff Report Follow-on Authorization from an emergency permit to replace to piles at Casitas Pier. May 2020.
- Carretta, James V., Karin. A. Forney, Erin M. Oleson, David W. Weller, Aimee R. Lang, Jason Baker, Marcia M. Muto, Brad Hanson, Anthony J. Orr, Harriet Huber, Mark S. Lowry, Jay Barlow, Jeffrey E. Moore, Deanna Lynch, Lilian Carswell, and Robert L. Brownell Jr. 2020. U.S. Pacific Marine Mammal Stock Assessments: 2019, U.S. Department of Commerce, NOAA Technical Memorandum NMFS-SWFSC-629.
- Daugherty, A. E., 1985. *Marine Mammals of California*. California Dept. of Fish & Game, Sacramento, CA. Species Booklet Series. 86 pp.
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- Yates, S., 1988. *Marine Wildlife of Puget Sound, the San Juans, and the Strait of Georgia*. The Globe Pequot Press, Chester, Conn. 262